

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of Application of	)	
	)	
STEPHANIE ENGSTROM	)	File No. BMAMDIH-20010129ADI
	)	
For Authority to Construct and Operate	)	
Multipoint Distribution Service	)	
Two-Way Facilities on	)	
Channels F1-F4(WMH725)	)	
Olympia, Washington	)	
	)	

**MEMORANDUM OPINION AND ORDER**

**Adopted: August 5, 2003**

**Released: August 7, 2003**

By the Chief, Public Safety and Private Wireless Division, Wireless Telecommunications Bureau:

1. In this *Memorandum Opinion and Order*, we address Stephanie Engstrom's (Engstrom) above-captioned application (FCC Form 331) to operate Multipoint Distribution Service (MDS) two-way stations on Channels F1 through F4 in Olympia, Washington.<sup>1</sup> Additionally, we address the petition to deny filed by Sherry Rullman (Rullman) against Engstrom's application.<sup>2</sup> For the reasons stated below, we grant Rullman's petition to deny.

2. *Background.* Multipoint Distribution Service channels are available for transmissions from MDS stations and associated MDS signal booster stations to receive locations, and from MDS response stations and response station hubs.<sup>3</sup> In 1998, the Commission adopted technical rule changes to provide MDS licensees flexibility to employ digital technology in delivering two-way communications services including high-speed and high-capacity data transmission and Internet service on a regular basis.<sup>4</sup> A two-way system typically consists of high-powered transmitters, one or more hub stations, which include transmitting and receiving antennas, and multiple return-path transceivers called response stations.

3. In preparing and filing two-way applications, applicants are required to follow a Commission-prescribed methodology for predicting interference from response station transmitters and to

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<sup>1</sup> The F Group channels are located at 2602-2608 MHz, 2614-2620 MHz, 2626-2632 MHz, and 2638-2644 MHz. See 47 C.F.R. § 21.901(a).

<sup>2</sup> Petition to Deny filed by Sherry Rullman and American Telecasting of Seattle, Inc. (filed Mar. 30, 2001) (Petition). Since the petition claims that interference to Rullman's station, we will refer to the petitioner as Rullman.

<sup>3</sup> 47 C.F.R. § 21.903.

<sup>4</sup> See Amendment of Parts 21 and 74 to Enable Multipoint Distribution Service and Instructional Television Fixed Service Licensees to Engage in Fixed Two-Way Transmissions, MM Docket No. 97-217, *Report and Order*, 13 FCC Red 19112 (1998).

response station hubs.<sup>5</sup> The methodology requires applicants to conduct four major steps in conducting a response station interference analysis.<sup>6</sup> First, the applicant must establish a grid of points that is statistically representative of the distribution of transmitters expected within the response service area, and determine the elevation of each point.<sup>7</sup> Second, the applicant must define any regions or classes of response stations.<sup>8</sup> Third, the system configuration must be analyzed in order to determine whether grid points can be eliminated from the analysis because of terrain blockage and to determine how to analyze the power radiating from the system.<sup>9</sup> Finally, the applicant must calculate the aggregate power from response station transmitters and use those values in its interference analysis.<sup>10</sup> The applicant is required to submit its analysis in a specified format and to provide copies of its analysis to all parties that are entitled to receive notice of the filing of its application.<sup>11</sup>

4. On June 30, 2000, the former Mass Media Bureau announced that there would be an initial filing window from August 14-18, 2000, for the filing of applications for two-way high-power signal booster stations, response station hubs and I channel<sup>12</sup> transmission licenses.<sup>13</sup> In response to that announcement, Engstrom filed an application on August 18, 2000.<sup>14</sup> Engstrom's application appeared on public notice as tendered for filing on November 29, 2000.<sup>15</sup> On January 29, 2001, Engstrom filed a major amendment.<sup>16</sup> The application, as amended, was accepted for filing on February 1, 2001.<sup>17</sup> On March 30, 2001, Rullman, the licensee of MDS Station WHT657 in the Seattle, Washington area,<sup>18</sup> filed a petition to deny against Engstrom's application. On April 26, 2001, Engstrom filed an opposition to

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<sup>5</sup> See Amendment of Parts 21 and 74 to Enable Multipoint Distribution Service and Instructional Television Fixed Service Licensees to Engage in Fixed Two-Way Transmissions, MM Docket No. 97-217, *Report and Order on Further Reconsideration and Further Notice of Proposed Rulemaking*, Appendix D ("Methods for Predicting Interference from Response Station Transmitters and to Response Station Hubs and for Supplying Data on Response Station Systems") 15 FCC Rcd 14566, 14510 (1998) (Appendix D).

<sup>6</sup> *Id.* at 14611 ¶ 2.

<sup>7</sup> *Id.* at 14611-15 ¶¶ 3-16.

<sup>8</sup> *Id.* at 14615-17 ¶¶ 17-24.

<sup>9</sup> *Id.* at 14617-19 ¶¶ 25-31.

<sup>10</sup> *Id.* at 14619-21 ¶¶ 32-39.

<sup>11</sup> *Id.* at 14630-48 ¶¶ 74-111.

<sup>12</sup> The I channels are channels in the 2686-2690 MHz band on which ITFS licensees may operate response stations. 47 C.F.R. §§ 74.939(j).

<sup>13</sup> Mass Media Bureau Provides Further Information on Application Filing Procedures and Announces Availability of Electronic Filing for Two-Way Multipoint Distribution Service and Instructional Television Fixed Service, *Public Notice*, 15 FCC Rcd 11466 (MMB 2000).

<sup>14</sup> File No. BPMDH-20000818ADE.

<sup>15</sup> Mass Media Bureau Multipoint Distribution Service and Instructional Television Fixed Service Applications Tendered for Filing, *Public Notice*, Report No. 148 (rel. Nov. 29, 2000).

<sup>16</sup> File No. BMAMDIH-20010129ADI.

<sup>17</sup> Mass Media Bureau Multipoint Distribution Service and Instructional Television Fixed Service Applications Accepted for Filing, *Public Notice*, Report No. 164 (rel. Feb. 1, 2001).

<sup>18</sup> MDS Station WHT657 operates on the F Group channels. On March 9, 1990, Rullman was granted a construction permit for its facilities at a site in Seattle, Washington. File No. BPMD-8312925 (granted Mar. 9, 1990).

Rullman's petition to deny.<sup>19</sup> On May 7, 2001, Rullman filed the first of five motions for extension of time to file a reply to Engstrom's opposition.<sup>20</sup> On June 22, 2001, Rullman filed a reply.<sup>21</sup>

5. *Discussion.* In the Petition, Rullman provided an engineering statement that purports to show that Engstrom's proposed facilities will cause harmful interference to Station WHT657.<sup>22</sup> In her opposition, Engstrom provides an engineering statement that claims her application will not cause new interference, or increase interference at any location experiencing interference.<sup>23</sup>

6. Section 21.909(d)(2)(v) of the Commission's Rules requires an applicant to engineer its two-way system to provide at least 45 dB of co-channel interference protection within the protected service area (PSA) of all other authorized or previously proposed stations.<sup>24</sup> We conclude that Rullman's Petition alone does not prove that Engstrom's application is defective. While the engineering statement attached to the Petition provides maps showing predicted interference, and it provides the results of the engineer's calculations, it fails to provide information concerning the data Rullman's engineering consultant used to make his calculations (*i.e.* the .DAT file submitted with Engstrom's application). Without that information, we are unable to determine whether Rullman's engineering consultant accurately analyzed Engstrom's proposal and assess the validity of the engineering statement.

7. Although the Petition may be of questionable sufficiency, we have the discretion to independently analyze and address the issues raised therein, particularly since they pertain to matters affecting the public interest – namely, avoidance of harmful interference. Because we were unable to resolve the interference issue solely on the engineering statements provided, the Division staff conducted an engineering analysis utilizing the information presented in the record before us to determine the application's compliance with the Commission's Rules. The analysis considered both the individual and aggregate signal strengths that would occur in the PSAs currently licensed to MDS Station WHT657 at Seattle, Washington. The staff also considered terrain obstructions and the standard 4/3 earth curvature. Based upon the staff's engineering analysis and our review of the record in this proceeding, we conclude that Engstrom application fails to comply with the Commission's Rules because it provides less than 45 dB of co-channel interference protection in parts of the PSA of Station WHT657. Specifically, the area where co-channel interference would exist is mainly in the area of the geographical overlap between WHT657's PSA and WMH725's PSA. Under the current rules, without mutual agreement between the licensees, the application is defective. Accordingly, we will grant Rullman's petition and direct the Public Safety and Private Wireless Division's Licensing and Technical Analysis Branch to dismiss Engstrom's application.

8. Accordingly, IT IS ORDERED, pursuant to Sections 4(i) and 309 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 309, and Section 74.912 of the Commission's rules, 47

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<sup>19</sup> Opposition to Petition to Deny (filed Apr. 26, 2001) (Opposition). The opposition was supplemented on April 27, 2001 to provide the original signature of Engstrom's engineering consultant. *See* Letter from Jay N. Lazrus, Esq. to Secretary, Federal Communications Commission (dated Apr. 27, 2001).

<sup>20</sup> Consent Motions for Extension of Time (filed May 3, 2001, May 7, 2001, May 18, 2001, Jun. 1, 2001, and Jun. 15, 2001).

<sup>21</sup> Reply to Opposition (filed Jun. 22, 2001).

<sup>22</sup> Petition, Engineering Statement of Larry J. Almaleh.

<sup>23</sup> Opposition, Engineering Statement of Bill Mundee in Support of Opposition to Petition to Deny Filed by Stephanie Engstrom.

<sup>24</sup> 47 C.F.R. §§ 21.909(d)(2)(v).

C.F.R. § 74.912, that the Petition to Deny filed by Sherry Rullman on May 30, 2001 against the above-captioned application IS GRANTED.

9. IT IS FURTHER ORDERED, pursuant to Sections 4(i) and 309 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 309, and Sections 74.903 and 74.912 of the Commission's Rules, 47 C.F.R. §§ 74.903, 74.912, that the Licensing and Technical Analysis Branch SHALL DISMISS the application filed by Stephanie Engstrom (File No. BMAMDIH-20010129ADI) consistent with this *Memorandum Opinion and Order*.

10. IT IS FURTHER ORDERED, pursuant to Section 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. § 154(i) and Sections 1.46 of the Commission's Rules, 47 C.F.R. § 1.46, that the Motions for Extension of Time filed by Sherry Rullman ARE GRANTED.

11. This action is taken under delegated authority pursuant to Sections 0.131 and 0.331 of the Commission's Rules, 47 C.F.R. §§ 0.131, 0.331.

FEDERAL COMMUNICATIONS COMMISSION

D'wana R. Terry  
Chief, Public Safety and Private Wireless Division  
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